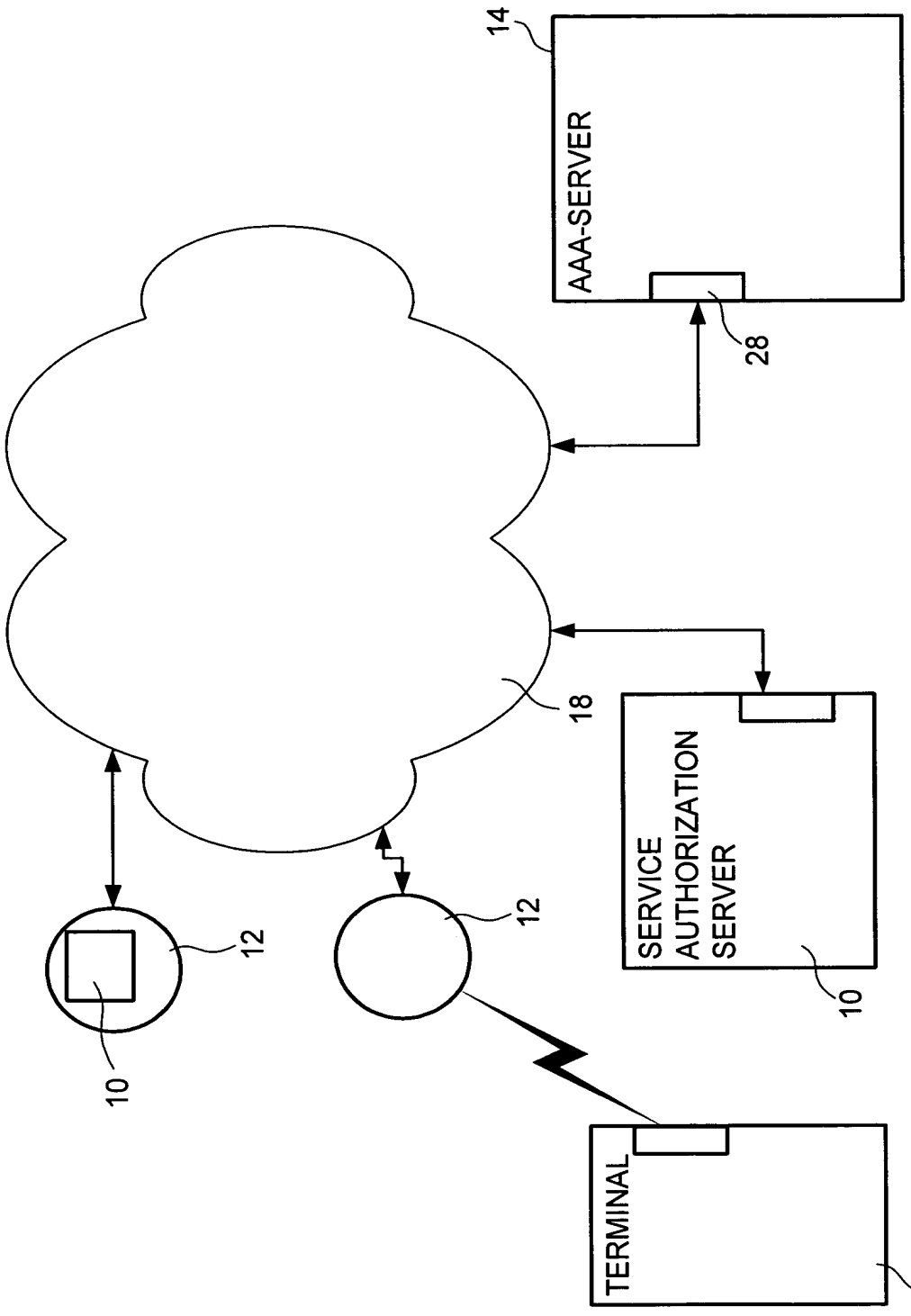
14
AAA-SERVER
28
18
SERVICE AUTHORIZATION SERVER
10
12
12
10
TERMINAL
16

FIG 1

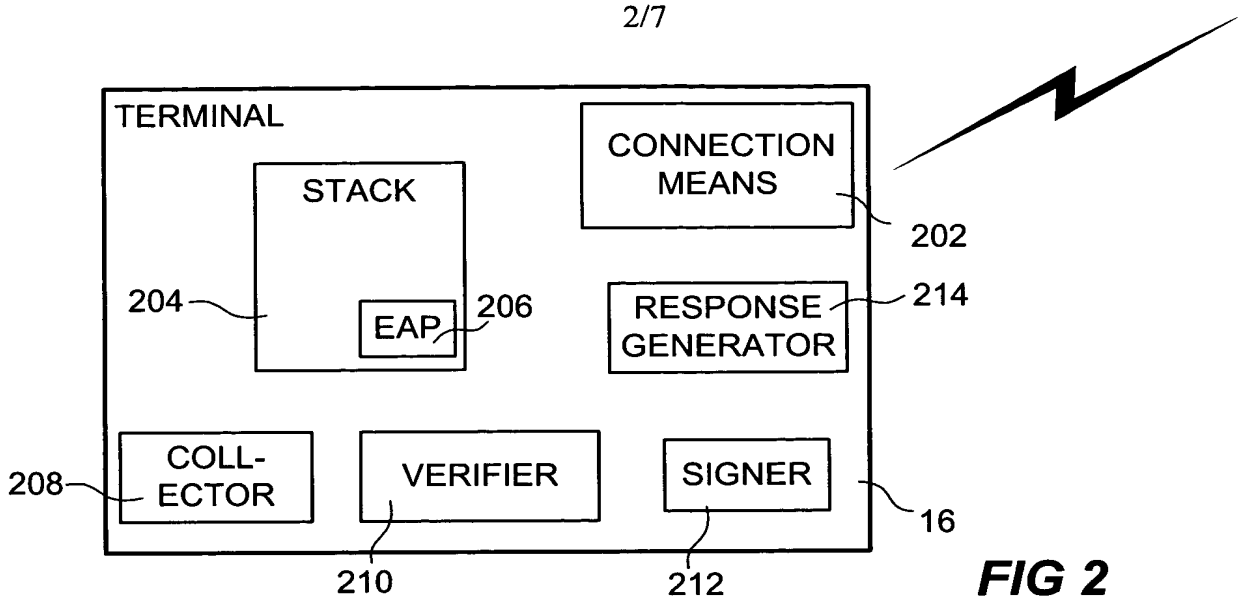
TERMINAL
STACK
204
EAP
206
CONNECTION MEANS
202
RESPONSE GENERATOR
214
COLL-ECTOR
208
VERIFIER
210
SIGNER
212
16

FIG 2

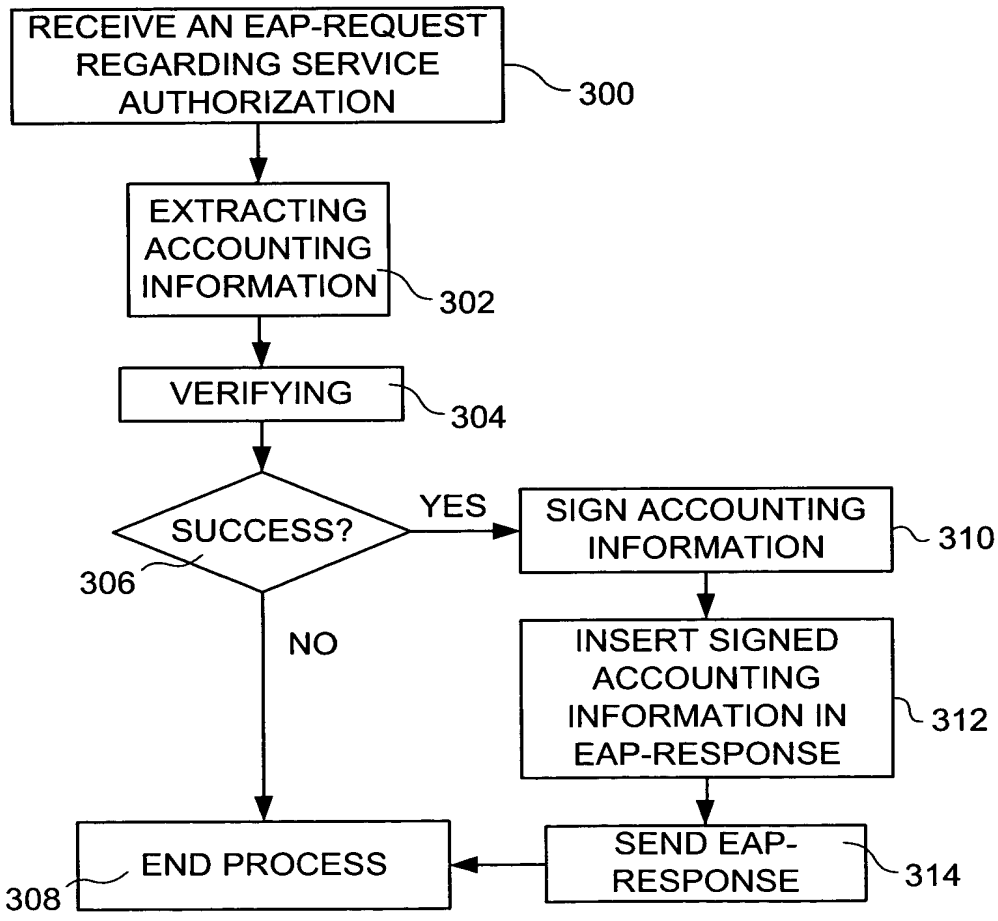
RECEIVE AN EAP-REQUEST REGARDING SERVICE AUTHORIZATION
300
EXTRACTING ACCOUNTING INFORMATION
302
VERIFYING
304
SUCCESS?
306
YES
SIGN ACCOUNTING INFORMATION
310
NO
INSERT SIGNED ACCOUNTING INFORMATION IN EAP-RESPONSE
312
END PROCESS
308
SEND EAP-RESPONSE
314

FIG 3

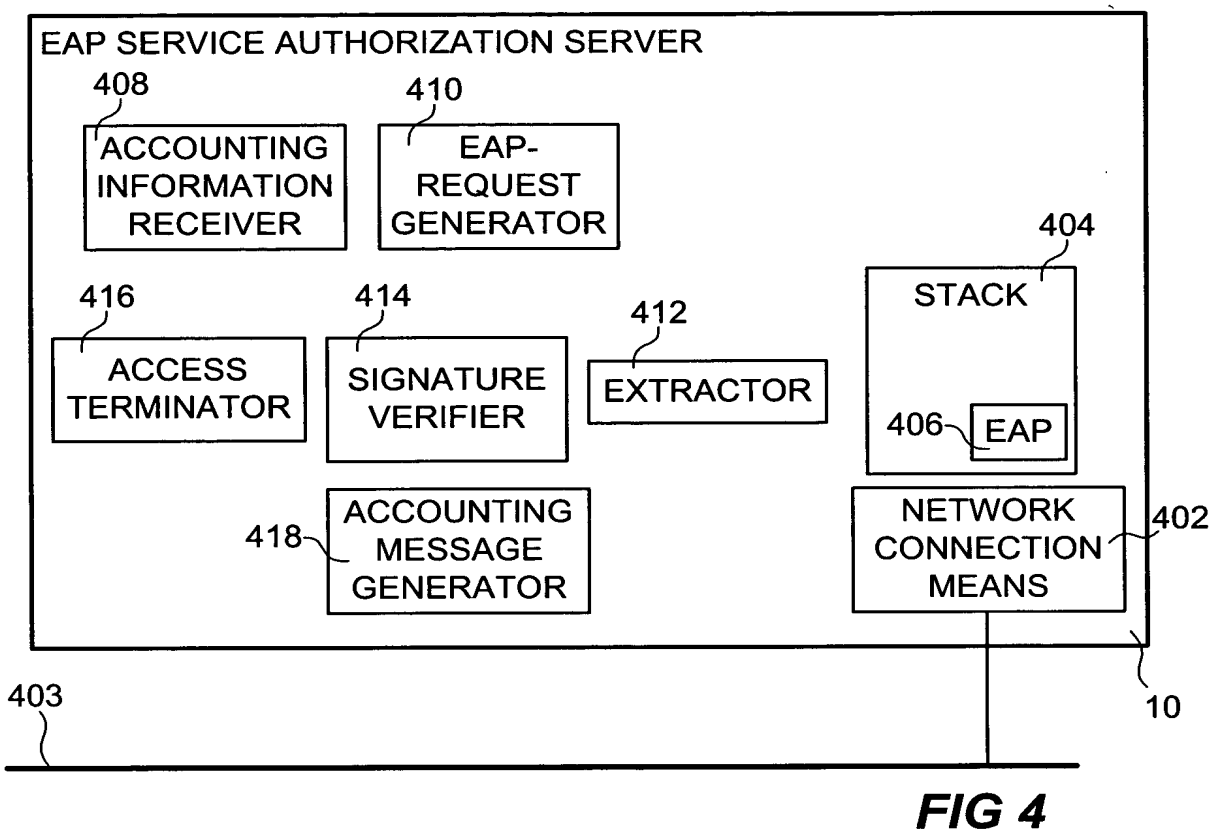
EAP SERVICE AUTHORIZATION SERVER
408
ACCOUNTING INFORMATION RECEIVER
410
EAP-REQUEST GENERATOR
404
STACK
406
EAP
416
ACCESS TERMINATOR
414
SIGNATURE VERIFIER
412
EXTRACTOR
418
ACCOUNTING MESSAGE GENERATOR
NETWORK CONNECTION MEANS
402
10
403

FIG 4

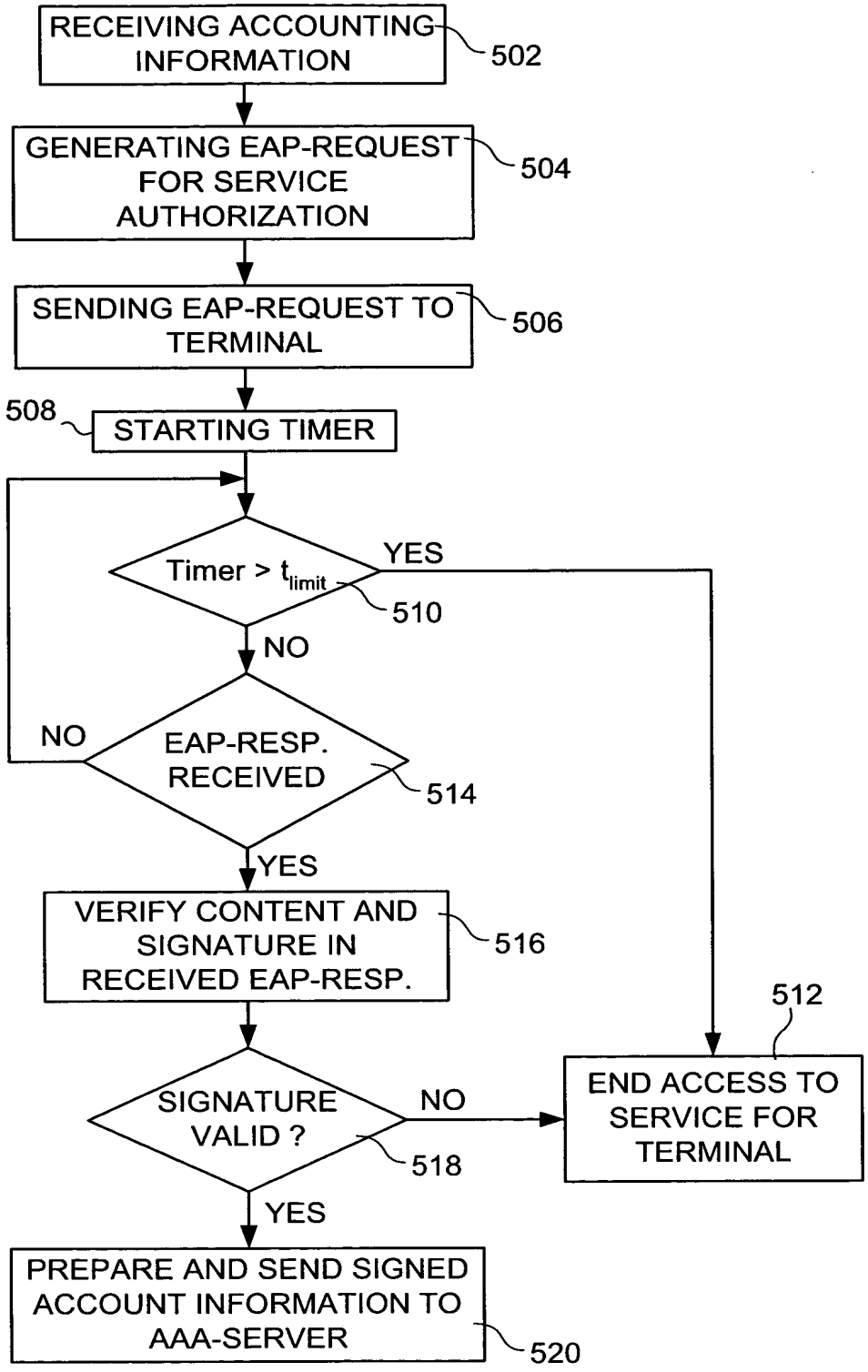
RECEIVING ACCOUNTING INFORMATION
502
GENERATING EAP-REQUEST FOR SERVICE AUTHORIZATION
504
SENDING EAP-REQUEST TO TERMINAL
506
508
STARTING TIMER
Timer > t_{limit}
YES
510
NO
EAP-RESP. RECEIVED
NO
514
YES
VERIFY CONTENT AND SIGNATURE IN RECEIVED EAP-RESP.
516
512
SIGNATURE VALID ?
NO
518
END ACCESS TO SERVICE FOR TERMINAL
YES
PREPARE AND SEND SIGNED ACCOUNT INFORMATION TO AAA-SERVER
520

FIG 5

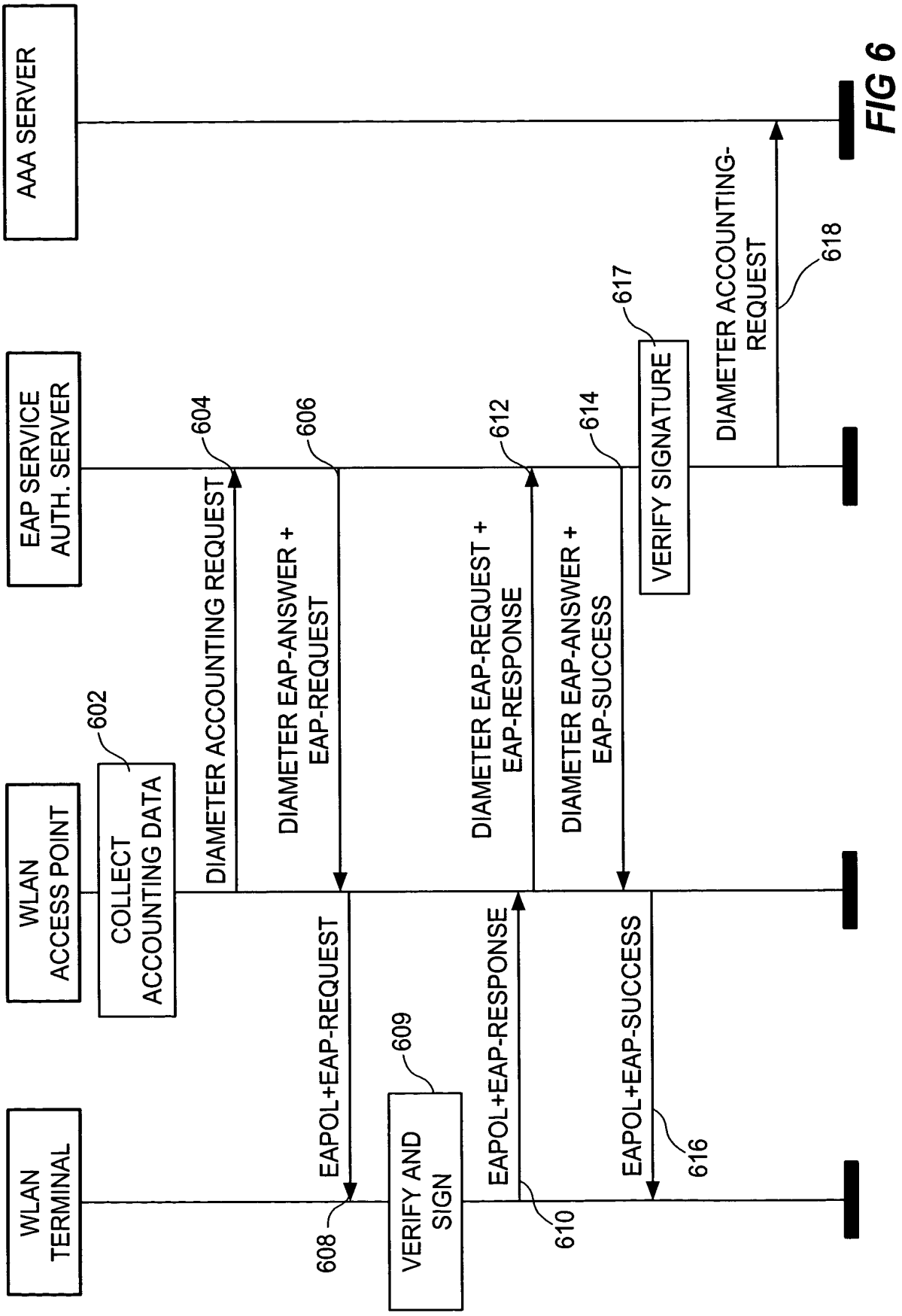
AAA SERVER
EAP SERVICE AUTH. SERVER
WLAN ACCESS POINT
WLAN TERMINAL
COLLECT ACCOUNTING DATA
602
DIAMETER ACCOUNTING REQUEST
604
DIAMETER EAP-ANSWER + EAP-REQUEST
606
EAPOL+EAP-REQUEST
608
VERIFY AND SIGN
609
EAPOL+EAP-RESPONSE
610
DIAMETER EAP-REQUEST + EAP-RESPONSE
612
DIAMETER EAP-ANSWER + EAP-SUCCESS
614
EAPOL+EAP-SUCCESS
616
VERIFY SIGNATURE
617
DIAMETER ACCOUNTING-REQUEST
618

FIG 6

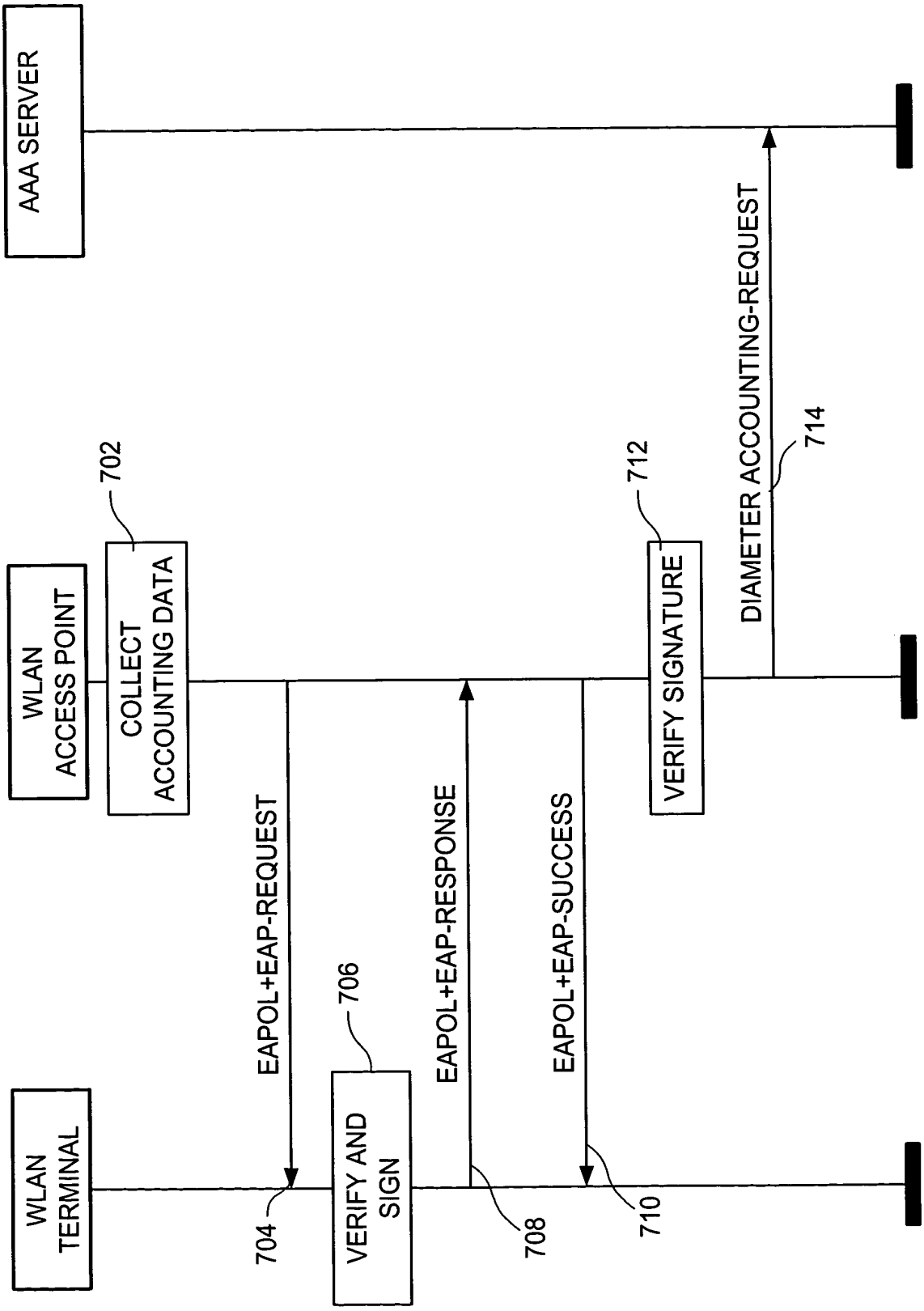
AAA SERVER
WLAN ACCESS POINT
COLLECT ACCOUNTING DATA
702
VERIFY SIGNATURE
712
DIAMETER ACCOUNTING-REQUEST
714
WLAN TERMINAL
EAPOL+EAP-REQUEST
704
VERIFY AND SIGN
706
EAPOL+EAP-RESPONSE
708
EAPOL+EAP-SUCCESS
710

FIG 7

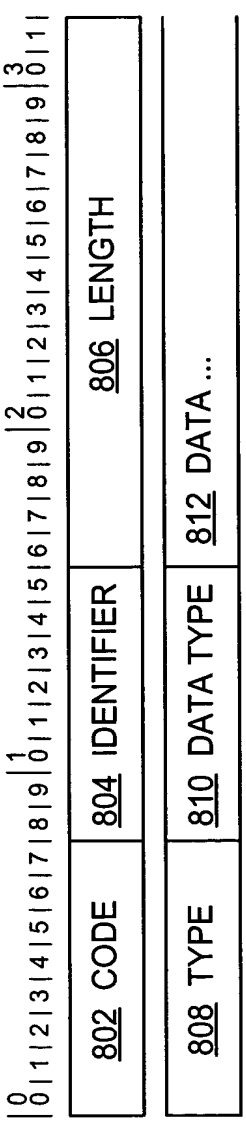

FIG 8

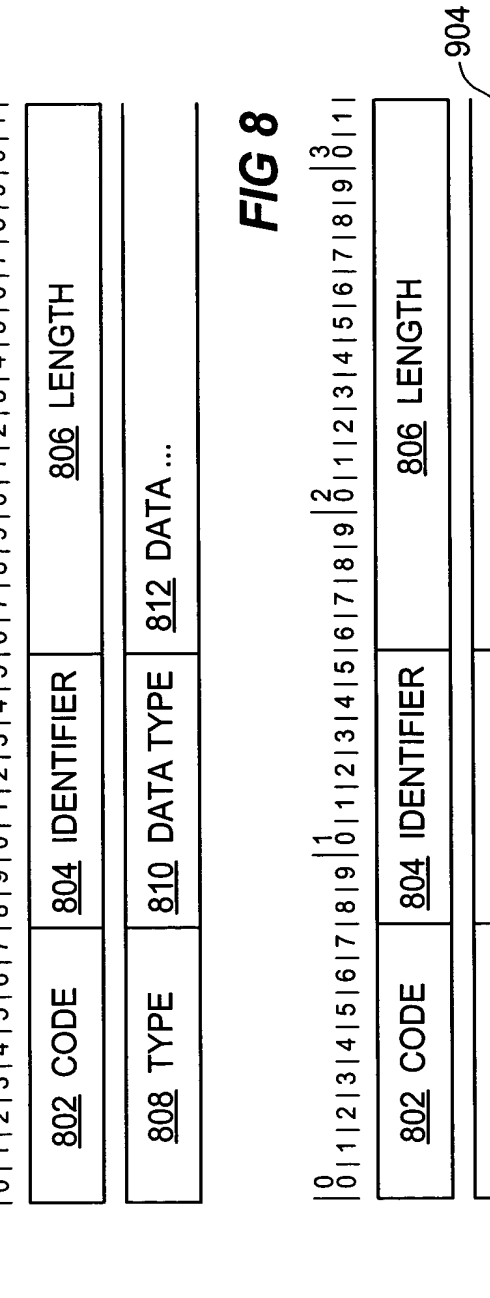

FIG 9

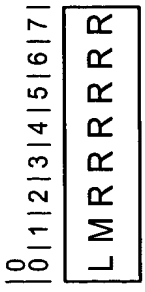

FIG 10